KOTOV, P.A., doktor tekhnicheskikh nauk.

Determining the correction capacity of the Baudot apparatus. (MLRA 9:1)
Vest. sviazi 7 no.8:11-14 Ag '47.
(Telegraph--Automatic systems)

KOTOV, P. A.

PA 41T7

USSR/Communications
Telegraphy - High Speed
Telegraphy - Equipment

Jan 1948

"Increasing the Rectifying Characteristics of the Bodo Apparatus," P. A. Kotov, Dr Tech Sci, 2½ pp

"Vest Svyazi, Elektro-Svyaz'" No 1 (94)

In "Vestnik Svyazi, Elektro-Svyaz'" No 8, 1947, appeared an article discussing several formulas for calculating rectification during normal operation of the Bodo apparatus. Kotov discusses several other aspects of this rectification. Explains effect of correction contact on the rectifying characteristic of the apparatus, Picar's system of correction when used with

shortened contacts of the Bodo apparatus, practical method of determining the degree of displacement of the correction contact, and interrelationship of shortened contacts of rings I and II on forering.

41T7

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APPROVED FOR RELEASE: 08/23/2000 CIA-RDP86-00513R000825410018-2

KOTOV, P.A., doktor tekhnicheskikh nauk.

Principles of the construction of combined start-stop and multiplex telegraph systems. Elektrosvias' 10 no.2:50-58 F '56. (MLRA 9:6)
(Telegraph)

FEDORTSOV, Boris Fedorovich; KOTOV, P.A., prof., retsenzent; ZELIGER, N.B., prof., retsenzent; BERGMAN, P.Ya., red.; SOBOLEVA, Ye.M., tekhn.red.

[Phototelegraphy] Fototelegrafiia. Moskva, Gos.energ.izd-vo, 1960. 354 p. (MIRA 13:5)
(Phototelegraphy)

KOTOV, P.A.

Devices for investigating telegraph channels. Elektrosviaz' 14 no.5:60-66 My '60. (MIRA 13:8)
(Radiotelegraph)

S/106/61/000/012/007/010
A055/A127

K.8000(1031,1132,1329)

AUTHOR: Kotov, P. A.

TITLE: Start-stop reception systems operating without interruption of the oscillations of the control pulse generator

PERIODICAL: Elektrosvyaz', no. 12, 1961, 50 - 55

TEXT: The well-known transistorized (or electron tube) startstop reception systems use a generator of control pulses, whose oscillations cease during the stop period. The start-stop reception systems described in this article can operate without any interruption of the control pulse generator oscillations. The system shown in Fig. 1 operates as follows: In the stop position, the control triggers T_6 and T_7 and all the triggers of the frequency divider occupy the position at which the high voltage comes from B. During the stop-signal reception period, the pulse from the "stop" contact of the distributor is applied to the input of T_6. This trigger flips over, and high voltage from its output B reaches cell I_1. At the reception of the stop signal, the reed of the reception relay is at its right-hand contact; high voltage is therefore applied also to the second input of I_1. From the output of I_1, high voltage gets to the input B of T_7, which

Card 1/3

Start-stop reception systems operating without...

tips over and supplies high voltage from the output B and low voltage from the output A. When there is no high voltage at the output A of T_7, the generator pulses will not pass through the cell I_2, and the pulse φ received from the output B of T_7 will set all the triggers of the divider into the position shown in Fig. 1 (in this position, high voltage exists at the outputs B of these triggers). The system will remain in this position until the reception of the start pulse. At the reception of this pulse, the reed of the relay will move away from the right-hand contact, and high voltage will cease to be applied to the input B of T_7. Then, the reed touching the left-hand contact, a pulse will be applied to the input A of T_7, and this trigger will tip over into the other position; high voltage from its output A will then be applied to I_2. From this moment on, the control pulses from the generator will be able to pass through I_2 and reach the input of the divider. The first control pulse will set all the divider triggers into the position at which high voltage will come from the A outputs. The operation of the start-stop reception system will begin. At the moment of the reception of the middle part of the start pulse, a pulse will be sent from the output B of T_5, and this pulse will set the distributor into the next steady position; at this moment, a short pulse from the "start" contact of the distributor will be applied to the in-

KOTOV, P.A.

Teletype receiving devices with control pulse generators in continuous operation. Elektrosviaz' 15 no.12:50-55 D '61. (MIRA 14:12)

(Telegraph--Automatic systems)

ACCESSION NR: AP4015253 S/0106/64/000/002/0001/0007

AUTHOR: Kotov, P. A.

TITLE: Traffic capacity of transmission systems with automatic error challenging in binary signals

SOURCE: Elektrosvyaz', no. 2, 1964, 1-7

TOPIC TAGS: signal transmission, signal transmission system capacity, automatic error challenging, automatic error correction, TOR system

ABSTRACT: A theoretical analysis is submitted of a binary-code transmission system in which errors are corrected by the sender upon an automatic challenge from the receiver. The system is similar to that described by Dupont (Teleprinting over radio circuits, L'Onde Electrique, May, 1954). The traffic carrying capacity of such a system is given by:

$$R_A = \frac{R_K}{L}\left[\sum_{i=1}^{S} u_i \frac{1-(1-q_i'')P_{00i}}{1+(m-1)(1-q_i'')P_{00i}} + l_0\right],$$

Card 1/2

ACCESSION NR: AP4015253

where $u_0 = \sum_{i=1}^{S} u_i$ is the length of all line segments containing errors numerically equal to the total number of elements; $l_0 = \sum_{i=1}^{S} l_i$ is the length of all segments without errors; $L = u_0 + l_0$ is the total number of transmitted elements; R_K is the error-detecting-code capacity; subscript i means the i-th section of the transmission line. Orig. art. has: 3 figures and 8 formulas.

ASSOCIATION: none

SUBMITTED: 19Feb63 DATE ACQ: 12Mar64 ENCL: 00

SUB CODE: CO NO REF SOV: 001 OTHER: 001

Card 2/2

ACC NR: AM6014344

Card 4/6

ACC NR: AM6014344

Card 5/6

ACC NR: AM6014344

SUB CODE: 09/ SUBM DATE: 12Jan66/ ORIG REF: 030/ OTH REF: 024

Card 6/6

KOTOV, P. F.

Feeding and Feeding Stuffs

Green fodder plan in the "Kamennaya" Steppe. Korm. baza 3 no. 7, 1952.

Monthly List of Russian Accessions, Library of Congress, September 1952. UNCLASSIFIED.

1. KOTOV, P. F., KUZ'MINA, S. S.
2. USSR (600)
4. Cattle; Pastures
7. Summer pasturing of cattle in the Kamen' steppe as Part of the green fodder plan. Sov. zootekh. 7 no. 6 (1952)
   Institut Zemledeliya Tsentral'noy Chernozemnoy Polosy imeni Prof. V. V. Dokuchayeva
9. Monthly List of Russian Accessions, Library of Congress, August 1952.
   UNCLASSIFIED

KOTOV, P. F.

Sowing of fodder by field sections Moskva, Gos. izd-vo sel'khoz. lit-ry, 1953. 110\p. (54-22227)

S603.K67

Kotov P.

TARASOV, T., KOTOV, P.

Forage Plants

Permanent feed supply is the basis for developing communal stockbreeding. Kolkh. proizv. No. 3, 1953.

9. Monthly List of Russian Accessions, Library of Congress, June 1953. Unclassified.

KOTOV, P. F.

Silage crops in the Chernozem region. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1954. 62 p.

KOTOV, P. F.

Stubble sowing of fodder crops izd. 2. Moskva, Gos. Izd-vo sel'khoz. lit-ry, 1954. 110 p. (54-42772)

S603.K67 1954

Q

USSR/Farm Animals - Swine

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69361

Author : Guseva, K.M., Knyazev, G.A., Kotov, P.F.

Inst : Scientific Research Institute of Agriculture of the Central Chernozem Belt

Title : Green Fodder for Swine

Orig Pub : Byul. nauchno-tekhn. inform. n.-i. in-ta s.-kh. TsChP, 1956, No 1, 41-42

Abstract : No abstract.

Card 1/1

TOMME, L., kandidat sel'skokhozyaystvennykh nauk; PANOVA, Ye.; KOTOV, P.

Using corn for fattening cattle. Mias. ind. SSSR 27 no.4: 40-41 '56. (MLRA 9:10)

1. Starshiy zootekhnik sovkhoza "Khutorok" (for Kotov).
(Corn (Maize)) (Feeding and feeding stuffs)

Kotov, P.

PANOVA, Ye.; KOTOV, P.

Fattening cattle with corn silage. Miss.ind.SSSR 28 no.4:48-50 '57.
(MLRA 10:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kukuruznoy proizvodstvennosti.
(Cattle--Feeding and feeding stuffs) (Corn (Maize))

KOTOV, P., kand. sel'skokhozyaystvennykh nauk; KOMAKODOV, V., kand. sel'skokhozyaystvennykh nauk; KOTOVA, G., kand. sel'skokhozyaystvennykh nauk.

Establishing an ever normal feed supply in the Central Black Earth region. Nauka i pered. op. v sel'khoz. 18 no.2:10-13 F '58. (Central Black Earth region--Feeding and feeding stuffs)(MIRA 11:3)

KOTOV, P.F., kand.sel'skokhoz.nauk, glavnyy red.; ALEKSANDROV, N.P., kand.sel'skokhoz.nauk, red.; KARPENKO, V.P., red.; KVASNIKOV, V.V., prof., doktor sel'skokhoz.nauk, red.; KOROL'KOV, V.I., prof., red.; PODGORNYY, P.I., prof., red.; SKACHKOV, I.A., kand.sel'skokhoz.nauk, red.; ZAPIVAKHIN, A.I., red.; KALASHNIKOVA, V.S., red.; GUREVICH, M.M., tekhn.red.

[Farm management system in the Central Black Earth Region] Sistema vedeniia sel'skogo khoziaistva v TSentral'no-chernozemnoi polose. Moskva, Gos.izd-vo sel'khoz.lit-ry, 1961. 470 p. (MIRA 14:4)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina. 2. Zamestitel' direktora Instituta sel'skogo khozyaystva imeni V.V.Dokuchayeva (for Kotov). 3. Direktor filiala po TSentral'no-chernozemnoy polose Vsesoyuznogo nauchno-issledovatel'skogo instituta ekonomiki sel'skogo khozyaystva (for Aleksandrov). 4. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Kvasnikov). 5. Voronezhskiy zoovetinstitut (for Korol'kov). 6. Voronezhskiy sel'skokhozyaystvennyy institut (for Podgornyy). 7. Direktor Nauchno-issledovatel'skogo instituta sel'skogo khozyaystva TSentral'no-chernozemnoy polosy imeni V.V. Dokuchayeva (for Skachkov).
(Central Black Earth Region--Agriculture)

KOTOV, P.F., kand.sel'skokhozyaystvennykh nauk; OLEYNIK, P.P.

Aftermath and capacity of shoot reproduction of sweet sorghum.
Agrobiologiia no.5:791-793 S-O '62. (MIRA 15:11)

1. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva TSentral'no-chernozemnoy polosy imeni V.V.Dokuchayeva, Voronezhskaya oblast'.
(Sorghum)

KOTOV, P.F., kand.sel'skokhozyaystvennykh nauk; ONUFRIYEV, A.F., aspirant

Cultivation practices in growing Jerusalem artichoke.
Zhivotnovodstvo 23 no.8:63-65 Ag '61. (MIRA 16:2)

1. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva TSentral'no-Chernozemnoy polosy imeni V.V.Dokuchayeva.
(Jerusalem artichoke)

KOTOV, Petr Filippovich, kand. sel'khoz. nauk; KOTOVA, Galina Petrovna, kand. sel'khoz. nauk; ADEL'FINSKAYA, Ye.N., red.; SHESHNEVA, E.A., tekhn. red.

[Growing corn for grain in the Central Chernozem Region] Kukuruza na speloe zerno v TSentral'no-chernozemnoi polose. Moskva, Izd-vo MSKh RSFSR, 1963. 69 p. (MIRA 16:7)

1. Nauchno-issledovatel'skiy institut sel'skogo khozyaystva TSentral'no-chernozemnoy polosy im. V.V.Dokuchayeva (for Kotov, Kotova).
(Central Chernozem Region—Corn (Maize))

KOTOV, P.F., kand. sel'khoz. nauk, nauchn.sotr.; KOMLODOV, V.V., kand. sel'khoz. nauk, nauchn. sotr.; OVCHINNIKOV, I.A.; NEMAROKOV, M.I.; BOGDANOV, V.M., prof.; KONDAKOV, N.A., kand. sel'khoz. nauk; BOBYLEV, V.S., kand. sel'khoz. nauk; ITUNINA, R.G., red.

[Improvement of natural pastures on slopes] Uluchshenie estestvennykh pastbishch na sklonakh. Voronezh, TSentral'no-Chernozemnoe knizhnoe izd-vo, 1964. 85 p. (MIRA 18:1)

1. Institut sel'skogo khozyaystva TSentral'no-Chernozemnoy polosy im. V.V.Dokuchayeva (for Kotov, Kommodov). 2. Nauchnyy rukovoditel' Pavlovskogo opytnogo lugovogo polya (for Nenarodov). 3. Zaveduyushchiy opornym punktom Instituta sel'skogo khozyaystva TSentral'no-Chernozemnoy polosy im. V.V.Dokuchayeva v kolkhoze "Rassvet" Ostrogozhskogo rayona Voronezhskoy oblasti (for Ovchinnikov). 4. Kurskiy Sel'skokhozyaystvennyy institut (for Bogdanov).

112-57-7-14522

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1957, Nr 7, p 111 (USSR)

AUTHOR: Kotov, P. G.

TITLE: Automatic Starting of Electric Motors Driving Deep Oil-Pumping Stations (Avtomaticheskiy zapusk elektrodvigateley stankov-kachalok)

PERIODICAL: Novosti neft. tekhn. Neftepromysl. delo (News of Oil Technology. Oil Industry), 1956, Nr 4, pp 28-29

ABSTRACT: A description and a circuit diagram of self-starting electric motors, designed to drive deep oil-pumping stations after an interruption in power supply, are presented. A mercury time relay is used that was built on an efficiency suggestion by workers of the Tuymazaneft' Oil Industry Administration. The relay comprises a glass tube with cemented ends and a metal tube with mercury placed inside a type VS resistor. The relay is mounted in the magnetic-starter housing and is connected in series with the starter's coil. On voltage reappearance, the current passes the VS resistor and heats the mercury, which expands and closes the magnetic-starter coil circuit, at the

Card 1/2

AUTHORS: Serensen, S. V., Kotov, P. I. SOV/32-24-9-23/53

TITLE: On the Question of the Technique for the Performance of Thermal Fatigue Tests (K voprosu o metodike provedeniya ispytaniy na termicheskuyu ustalost') Survey (Obzor)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 9, pp 1097-1106 (USSR)

ABSTRACT: The Russian scientist D. K. Chernov (Ref 1) was the first to point to the phenomenon of thermal fatigue. The paper under discussion describes the deformation process in thermal fatigue and, by way of illustration, gives a diagram of the amplitude change in the plastic deformation of austenite steels, as obtained by Forrest (Ref 2). With regard to the question of the influence of various factors on the size and distribution of non-stationary thermal stresses, the papers by S. P. Timoshenko (Ref 9), Yu. N. Tayts (Ref 10), and Jaeger (Yeger) (Ref 11) are mentioned, as are those by V. A. Lomakin (Refs 5-7). The deformation rate in cyclic heating is explained in connexion with the investigations made by F. F. Vitman and N. A. Zlatin (Refs 12,13) and Nadaj (Nadai) (Ref 14). In the section on the role of stresses of the second type (thermostructural), the

Card 1/3

On the Question of the Technique for the Performance of Thermal Fatigue Tests. Survey

experiments made by Boas and Honeycombe (Boas and Khonekomb) (Ref 15) are given, as are the papers by V. I. Arkharov and A. I. Semenova (Ref 18) and K. Chizuik and R. Kel'man (Ref 17). With regard to the investigations of the influence, on the properties of the material, of a cyclic temperature change (without thermal stress), the data obtained by R. N. Sizova and N. Ya. Nikolenko are presented, the corresponding alloys being specified. The growth of the fissures has been investigated, inter alia, by L. A. Glikman (Ref 29). In connexion with the current methods for the determination of thermal fatigue resistance in materials, the data obtained by A. A. Bochvar (Ref 32), experiments conducted by Beutele and Lowthian (Beutele and Lovtian) (Ref 35), and by A. A. Klypin (Ref 25), and investigations made by Coffin (Koffin) (Refs 37-39), V. N. Kuznetsov (Ref 40), and A. V. Ratner (Refs 26,36) are given, together with the corresponding explanations. By way of conclusion, the reproducibility of the process of thermal fatigue is discussed, and a detailed conclusion is given.
There are 13 figures, 1 table, and 40 references, 29 of which are Soviet.

28(5)
AUTHORS: Serensen, S. V., Kotov, P. I.

05736
SOV/32-25-10-25/63

TITLE: Tests by Periodic Thermal Stress of Variable Intensity in Connection With the Investigation of Thermal Fatigue

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 10, pp 1216-1223 (USSR)

ABSTRACT: To rate the stresses under nonstationary thermal conditions for a massive cylinder of the EI 437 B alloy (diameter 10 mm), the stresses and deformations (within the elasticity limits) appearing at periodic temperature variations on the surface at a rate of 100°/sec (heating from 0 to 800° and cooling from 800 to 0°) were determined. The computations of the measurement results (Fig 1) show that considerable thermal stresses exceeding the flow limit as well as considerable plastic-elastic deformations (about 0.5 - 0.7%) develop. To investigate the resistance to destruction of alloys on periodic appearance of such deformations, a device like that by Coffin (Ref 3) may be used as has been done in the present case (Fig 2). The circuit scheme (Fig 3) of the device ensures the temperature conditions desired, one of the three thermocouples attached to the sample being connected to a

Card 1/2

IVCHENKO, D.F., inzh.; KOTOR, P.I., aspirant

Optical strain gauge. Izv.vys.ucheb.zav.; mashinostr. no.7:51-54 '59. (MIRA 13:6)

1. Moskovskiy aviatsionno-tekhnologicheskiy institut.
(Strain gauges)

The Bauschinger effect in ...

a somewhat smaller decrease of elastic and yield limits in the compression stage. The Bauschinger effect appears also at high temperatures, its stabilization at 700°C is reached in the fourth cycle. The elastic limits for tension and compression decreased by 34 and 41 % respectively for a temperature of 800°C. There is a marked difference in the characteristics when comparing the steady state with the first load cycle at various temperatures. There is a slight increase of yield point at 700°C in the period of stabilization. From the data it is possible to see that the limits of elasticity and yield at 20 and 800°C for tension exceed those due to compression. The reverse is valid for 700°C. The cyclic deformation with amplitudes of 1 % marks a significant drop in the elastic and proportionality limits, and a less significant one in the yield point. At 800°C there is a more pronounced drop in the characteristics. The Bauschinger effect increased with lower residual deformation. There are 7 figures, 1 table and 7 references: 4 Soviet-bloc and 3 non-Soviet-bloc. The references to the English-language publications read as follows: R.L. Wolley, The Bauschinger effect in some face-centred and body-centred cubic

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32025
S/145/60/000/005/007/010
D221/D301

The Bauschinger effect in ...

metals, J. of theoretical, experimental and applied physics, v. 44, no. 383, 1953; L. Bairstow, Phil. Trans. Roy. Soc., v. A, 1910, 210.

ASSOCIATION: Moskovskiy aviatsionnyy tekhnologicheskiy institut (Aviation Technological Institute, Moscow)

SUBMITTED: November 14, 1959

81813

S/096/60/000/08/013/024
E194/E484

18.82.00

AUTHORS: Serensen, S.V., Academician and Kotov, P.I., Engineer

TITLE: The Process of Elastic-Plastic Strain of Alloy EI-437B Due to Thermal Fatigue

PERIODICAL: Teploenergetika, 1960, Nr 8, pp 60-66 (USSR)

ABSTRACT: To assess numerically the resistance to thermal fatigue of materials that operate under rapidly varying temperature conditions it is important to study the process of elastic-plastic strain but in this respect insufficient attention has yet been paid to strain in the initial stages and after a number of temperature cycles. Elastic-plastic strain of constant amplitude at given temperature is first considered. Since alloy EI-437B loses much of its strength at temperatures above 700°C the tests were made at temperatures of 20, 700 and 800°C with a few at 600°C. The amplitudes of the elastic-plastic strains ranged from 0.3 to 1%. By way of example, Fig 2 illustrates the process of elastic-plastic strain with an amplitude of 1% at temperatures of 20, 700 and 800°C. With cyclic loading the strain process

Card 1/5

4

81813
S/096/60/000/08/013/024
E194/E484

The Process of Elastic-Plastic Strain of Alloy EI-437B Due to Thermal Fatigue

becomes stabilized at all temperatures and so the shape and size of the hysteresis loop is stabilized. In the first cycles there is a considerable decrease of the elastic limit and also of the yield point. A number of secondary factors were studied such as the influence of holding for eight hours under stress in the hot condition, preliminary cyclic straining, and transition from one test temperature to another at various rates; but these were found to have little influence on the strain process and the conditions of stabilization at the test temperatures used. For alloy EI-437B there are two regions of stabilization, one from 20 to 700°C and the other over 700°C. The differences between them are briefly discussed and graphs of changes in the remanent strain for a stabilized cycle at various test temperatures are given in Fig 4. Graphs showing the relationship between the remanent strain and the elastic-plastic strain amplitude are plotted in Fig 5 and are approximately

Card 2/5

4

The Process of Elastic-Plastic Strain of Alloy EI-437B Due to Thermal Fatigue

linear irrespective of temperature. The process of elastic-plastic strain of given amplitude with varying temperature is then considered on a theoretical basis and a diagram of the process is given in Fig 6. The different behaviour of the material at temperatures below and above 700°C is discussed. At temperatures below 700°C stabilization occurs rapidly. At temperatures above 700°C the mechanical strength of the material is lower when it is hot than when it is cool and so the process is asymmetrical. This has the effect of increasing the remanent strain. The process of elastic-plastic strain during thermal fatigue is then considered. This process takes place at variable temperature, the cyclic loading resulting from thermal expansion and contraction of the material. The process is described with reference to the theoretical cyclic strain diagram of Fig 7. The sample is represented as a combination of rigid and elastic elements. The approximate analysis

Card 3/5

81813
S/096/60/000/08/013/024
E194/E484

The Process of Elastic-Plastic Strain of Alloy EI-437B Due to Thermal Fatigue

of cycles and at suitable temperatures. These diagrams can be obtained by the procedure described in the first part of the article. There are 9 figures and 8 references, 5 of which are Soviet and 3 English.

ASSOCIATION: TsIAM

Card 5/5

32709
S/145/60/000/012/004/008
D221/D301

18.8200 1413

AUTHORS: Serensen, S. V., Doctor of Technical Sciences, Professor, and Kotov, P. I., Engineer

TITLE: Investigating the process of elastic and plastic deformation of the ЭИ-437Б (EI-437B) alloy during cyclic loading

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye, no. 12, 1960, 110-126

TEXT: The amplitudes of deformation were 0.3, 0.5, 0.8 and 1.0% and the temperature levels 20°, 700° and 800°C. Methods of testing and equipment were described in previous papers. The analysis of data obtained shows rapid stabilization of the process (after 3rd - 5th cycle). There is a marked influence of the process (after effect on the second and subsequent cycles. At temperatures of 20 and 700°C an insignificant increase of the maximum stress due to compression and tension is noticed. At 800°C there is an inverse phenomenon of reduced maximum stress as compared to the first

Card 1/3

Investigating the process ...

fore and after the pause. There are 14 figures and 6 references: 4 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: E. E. Balwin, G. I. Sokol and L. F. Goffin, American Society for Testing Materials, Proceedings, v. 57, 1957, 567-586; H. Majors, Trans. of American Society for Metals, v. 51, 1959, 421-437.

ASSOCIATION: MATI

SUBMITTED: March 26, 1960

X

Card 3/3

SERENSEN, S.V.; KOTOV, P.I.

Method and the set-up for investigating the process of elasto-plastic deformation under tension and compression. Zav.lab. 26 no.3:332-335 '60. (MIRA 13:6)
(Strength of materials) (Testing machines)

85384
S/032/60/026/010/015/035
B016/B054

18 8200

AUTHORS: Serensen, S. V. and Kotov, P. I.

TITLE: Reproduction of the Process of Elastoplastic Deformation in Thermal Fatigue

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 10, pp. 1133-1136

TEXT: The authors discuss the process of destruction of workpieces by thermal fatigue due to cyclic thermal stresses in turbo-engines. Fig. 1 schematically shows a simulation of elastoplastic deformation in thermal fatigue. The authors derive the deformation equations for different temperature cycles. By means of these, the values for rigidity, and the cyclograms of deformation at constant, but different, temperatures which are sufficiently close together, it is possible to characterize the deformation process $\delta_1 = f(\tau)$ of a sample under cyclic stress, which simulates the process of elastoplastic deformation in thermal fatigue. The authors stress the fact that the reproduction of thermal fatigue involves considerable difficulties. Apart from the fact that the apparatus

Card 1/2

Reproduction of the Process of Elastoplastic Deformation in Thermal Fatigue

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B016/B054

with preset thermal conditions and a corresponding stress is very complicated, several experiments must be carried out before to determine the law $\delta_1 = f(\tau)$ (as well as $\sigma = F(\tau)$) (in order to establish deformation diagrams). This must be done for different constant temperatures within the respective temperature range of the thermal cycle. At the same time, the investigation of elastoplastic deformation (e.g., according to L. Coffin, Ref. 4, or the authors' paper of Ref. 5) is rendered difficult by several circumstances. For these reasons, the simulating tests described would offer - in spite of the difficulties mentioned - better possibilities of investigating elastoplastic deformation. Further, this method will be of particular importance in studying the characteristic features of the accumulation of plastic deformations, and, what is more, in studying the conditions of destruction by thermal fatigue. There are 3 figures and 6 references: 4 Soviet and 2 US.

KOTOV,P. I. Cand Tech Sci -- "Resistance of heat-proof alloys to repeated plastic-elastic deformations in connection with thermal fatigue." Mos, 1961 (Mos Phys Engineering Inst). (KL, 4-61, 197)

28166

24.4200 1327, 2607, 1191

S/145/61/000/001/004/006
D294/D303

AUTHOR: Kotov, P. I., Assistent

TITLE: Cyclic resilient-plastic deformation of ЭИ-437B (EI-437B) alloy in connection with loading and heating conditions

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye, no. 1, 1961, 123-138

TEXT: In this article the process of deformation of EI-437B alloy, with cyclic loading beyond the limit of resilience, at constant, but different temperatures (also at high ones), is analyzed. Quick stabilization of the cyclic resilient-plastic deformation process is described, when deformation changes according to symmetric and pulsating cycles at all temperature levels. First, this applies to stationary gas turbines. Analysis of deformation conditions in metal shows that several cases of such deformation are possible. The author investigates 4 cases of deformation and gives pertinent graphs. The article particularly analyzes the process

Card 1/2

Cyclic resilient-plastic ...

of resilient-plastic deformation under symmetrical and pulsating cycles. Research was carried out using deformation amplitudes equal to 0.5 and 0.8%, at temperatures of 20, 700 and 800°C. Analysis of graphs shows that the manifestation of Bauschinger's effect is practically the same as in cases when deformation takes place beyond the resilience limit, or when it is performed under the action of repeated outside forces without restriction of deformation limits. It was established that at 700°C the maximum stresses increase and the hysteresis loop somewhat decreases, while at 800°C the maximum stresses decrease and the hysteresis loop correspondingly expands by 0.08 - 1.00%. For amplitudes of resilient-plastic deformation equal to 0.5 - 0.8%, the maximum stresses during the period of stabilization increase by approximately 5 kg/cm^2 for both expansion and compression. There are 11 figures, 1 table and 3 Soviet-bloc references.

ASSOCIATION: Moskovskiy aviatsionno-tekhnologicheskiy institut (Moscow Aviation Engineering Institute)

SUBMITTED: September 9, 1960

Card 2/2

24.4200
10.6400

28172

S/145/61/000/005/006/009
D221/D306

AUTHORS: Serensen, S.V., Doctor of Technical Sciences, Professor, and Kotov, P.I., Aspirant

TITLE: Approximation of deformation graphs during cyclic loading of alloy, ЭИ-437Б(EI-437B) beyond the limit of elasticity and within a wide range of temperatures

PERIODICAL: Izvestiya vysshykh uchebnykh zavedeniy Mashinostroyeniye, no. 5, 1961, 60 - 73

TEXT: The article discusses the problem of approximation of curves of cyclic elastic-plastic deformation of EI-437B alloy at temperatures of 20, 700 and 800°C. The investigation demonstrated that there is a rapid stabilization of the process. The limit of strength and the yield point on compression as well as on tension drop prior to stabilization, and two temperature zones are noticed. Concurrently, the modulus of elasticity changes with the number of cycles. The most widely used method of approximation is the polyzonal relationship (Fig. 3a) and the parabolic procedure of Fig. 3b.

Card 1/8

28172
S/145/61/000/005/006/009
Approximation of deformation ... D221/D306

For the section of uniform plastic deformations use is made of stepped (Fig. 3c) and partial linear relationships, that are described by G.I. Dikman (Ref. 8: O krivykh povtornoy plasticheskoy deformatsii, Prochnost' detaley aviatsionnogo dvigatelya, Sb. statey, no. 24, Oborongiz, 1957). Data indicate that tension at 20°C is characterized by linear behavior beyond the elastic limit and

$$\sigma_i = E \cdot \varepsilon_i \left[1 - \lambda\left(1 - \frac{\varepsilon_o}{\varepsilon_i}\right)\right] \qquad (1)$$

is proposed as an approximation. The graph at 700°C reveals a curvilinear character. Preliminary analysis indicates the possibility of using

$$\varepsilon_o = \frac{\sigma_o}{E} \quad (2), \qquad \sigma_o = \frac{\sigma_y + \sigma_\pi}{2} \quad (3), \qquad E_1 = \frac{\sigma_m - \sigma_o}{\varepsilon_m - \varepsilon_o} \quad (4)$$

for the deformations at the start of linear changes. In above equations (including Eq. 1) σ_o is the deformation at the start of stressing [Abstractor's note: No explanation given about remaining

Card 2/8

Approximation of deformation ...

designations]. σ'_m is the stress of maximum deformation ε_m. The stress parameter λ is determined by interpolating the stress modulus E_1 at temperature t_1 on the basis of data for 20 and 700°C. The large errors involved with the use of polynomial approximation makes it unsuitable for graphs of cyclic deformations. In problems where the curvilinear section is important, then the deformation graph is presented in three sections as in Fig. 3b, where the curved part can be approximated by a parabola with α as an exponent. In this case

$$\sigma_i = \sigma_T - E''(\varepsilon_T - \varepsilon_i) - (E' - E'') \frac{\varepsilon_T - \varepsilon_i^\alpha}{(\varepsilon_m - \varepsilon_{pc})^{\alpha-1}}, \quad (5)$$

$$\alpha = \frac{E - E''}{E' - E''} \quad (6)$$

are used. The boundary of the curvilinear section can be formed by the limit of proportionality and the condition yield point, and

Approximation of deformation ...

the approximation is ensured by taking into account the Bauschinger effect for cyclic deformation. Comparison of experimental data with results of parabolic approximation is given. The deformation graphs for some materials are quite well aprroximated by the step function of

$$\sigma_i = A\varepsilon_i^{\alpha} \qquad (10)$$

when beyond the limit of elastic deformations (Fig. 3c). In the above A and α are some coefficients determined by experiments from two limit points. Analysis of deformation graphs for all temperatures revealed two characteristic zones, where the step approximation is defined by various parameters A and α. The variants of approximation suffer from disadvantages, in particular as it is necessary to deal with three sections of deformation. The use of partial linear approximation given by

$$\sigma_i = \frac{\alpha\varepsilon_i + \beta}{\varepsilon_i + \gamma}, \qquad (11)$$

Card 4/9

where α, β and γ are parameters, avoids these difficulties. Calculations demonstrated that there is a good agreement at all temperatures of deformation for EI-437B alloy except for the first cycle of tension at 20°C. To plot deformation graphs for any temperature between 20 and 800°C, it is not enough to employ interpolation coefficients α, β and γ only as this may lead to significant errors at boundary points 1, 2 and 3. The carrying capacity is approximately determined by

$$\sigma'_i = m - ne^{-p\varepsilon_i}, \qquad (13)$$

where m, n and p are constants. As in the case of the fractional linear function, this approximation is obtained by coincidence of three points, of which σ'_1 and ε_1 correspond to the limit of proportionality and σ'_3 and ε_3 to the specified σ_m and ε_m, whereas σ'_2 is found from the graph for the preliminarily calculated ε_2. The remaining coefficients are derived from linear relationship in semilog coordinates,

Card 5/8

Approximation of deformation ...

$$\lg(m - \sigma_i) = \lg n - (p \lg e)\epsilon_i. \qquad (14)$$

The accuracy is adequate, especially when there is a maximum elastic-plastic deformation of 1 %. Investigations of V.S. Serensen and P.I. Kotov (Ref. 12: Issledovaniye protsessa urpugo-plasticheskogo deformirovaniya splava EI-437B pri tsiklichnom nagruzhenii. "Izvestiya vuzov. Mashinostroyeniye", no. 10, 1960) indicated that amplitudes of elastic-plastic deformations have an important effect on features of the deformation process and conditions of stabilization. The following conclusions are drawn: It is necessary to consider two zones of temperatures for approximation: Linear stressing for the first cycle at $t_i \leq 700^\circ C$, when the polygonal relationship is adequate. The second is in the case of uniform and continuous stressing over the entire stage of uniform plastic deformations, when fractional linear and exponential functions are the best approximations. Experimental data obtained at three temperatures for EI-437B alloy suffice for plotting a deformation graph at any temperature. There are 9 figures, 3 tables and 12

Card 6/8

Approximation of deformation ...

Soviet-bloc references.

ASSOCIATION: Moskovskiy aviatsionnyy tekhnologicheskiy institut (Moscow Aviation Technological Institute)

SUBMITTED: December 26, 1960

Fig. 3. Schemes of approximation for deformation curves: a) Polygonal graph of tension; b) graph of tension which has a junction of elastic section and straight line of stressing on a parabola; c) graph of tension described by a step function for section 1 - 3; d) graph of tension described by fractional linear function for section 1 - 3.

Card 7/8

S/032/61/027/008/014/020
B107/B203

AUTHORS: Serensen, S. V., and Kotov, P. I.

TITLE: Method of recording cyclically changing temperatures and stresses in thermal fatigue tests

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 8, 1961, 1015 - 1018

TEXT: The present paper gives some hints for measuring the temperature field and the elastoplastic properties in thermal fatigue tests. Only the methods are discussed; experimental results had been earlier reported (S. V. Serensen and P. I. Kotov, Zavodskaya laboratoriya, v 25, no. 10 (1959)). Chromel-Alumel thermocouples were used for temperature measurements up to 1000°C. In preliminary tests, 0.5 mm diameter thermocouples, as compared with those of 0.2 mm diameter, showed considerable inertia, i. e., of 40 - 60°C at temperature fluctuations of 50 - 100°C/sec. The inertia of 0.2 mm diameter thermocouples was compared with a thermocouple made of thinly rolled (0.08 - 0.05 mm) Chromel and Alumel foils. The 0.2 mm thermocouples showed practically no inertia. Both types were used for the

Card 1/3

tests: 0.5 mm for controlling the ЭРМ-47(ERM-47) thermoregulator, and the less heat-resistant 0.2 mm thermocouples for indications on a portable potentiometer. The ЭПП-09(EPP-09) potentiometer is recommended for recording. Thus, the temperature distribution in the workpiece can be measured. It is shown to be irregular and asymmetrical due to the cooling air current. For measuring the deformation, rods were used as dynamometers connecting the fixing washers with an especially calculated dynamometer part. For measuring the load, resistance strain gauges attached to the dynamometer part were used such as electronic strain gauges made by the TsAGI. In fatigue tests, the temperature in the dynamometer rods may rise and bring the Wheatstone bridge out of equilibrium. Therefore, the rods must be cooled, and the bridge equilibrium should be controlled regularly. To observe the process of elastoplastic deformation at cyclic temperature variations, an oscilloscope with wide strip chart is recommended. Satisfactory results were obtained with a K-12(K-12) oscillograph. A type VII measuring loop was used for recording the temperature cycle. The indication greatly depends on the resistance of thermocouples; a family of calibration curves for thermocouples of different resistances are required for the evaluation. At the same time, the stresses are recorded with a type V measuring loop. The

Card 2/3

Method of recording cyclically...

sensitivity of the measuring loop, however, is too low; therefore, the signal has to be amplified. There are 5 figures and 5 references: 2 Soviet-bloc and 3 non-Soviet-bloc.

Card 3/3

S/145/62/000/010/002/006
D263/D308

AUTHOR: Kotov, P.I., Candidate of Technical Sciences

TITLE: Thermal fatigue of alloy ЭИ-437Б (EI-437B) with varying rigidity of loading

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye, no. 10, 1962, 69-80

TEXT: The article deals with a series of experiments. Testing installation and methods of testing are described in detail and the results of the experiments are analyzed. Conclusions: Resistance to thermal fatigue depends considerably on the level of thermal stresses and loading rigidity. The equation of the thermal fatigue curve, independent of thermal conditions, is approximately:

$$\overline{N} = A^{L - \theta}$$

($A = 1.161 \times 10^4$, $\theta = \frac{\varepsilon_n}{\varepsilon_t}$, ε_n - value of elastic-plastic deformation,

Card 1/2

ϵ_t - limiting elastic-plastic deformation when thermal and mechanical deformation are equal). Resistance to thermal fatigue depends also on material properties and working conditions. Crack growth and destruction under varying loading conditions are independent of the temperature level (up to 950°C) and magnitude of deformation (up to 1.5%). There are 12 figures and 2 tables.

ASSOCIATION: Moskovskiy aviatsionnyy tekhnologicheskiy institut (Moscow Institute of Aeronautical Technology)

S/032/62/028/010/006/009
B117/B186

AUTHORS: Serensen, S. V., and Kotov, P. I.

TITLE: Estimation of the thermal fatigue strength by the method of variable load rigidity

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 10, 1962, 1233 - 1238

TEXT: The thermal fatigue strengths of the heat-resistant alloys ЭИ437Б (EI437B) and ЭИ867 (EI867) were tested at given temperatures (minimum constant at 100°C; maximum variable in succession between 700 and 1000°C) and under variable load rigidity conditions ($3.28 \cdot 10^5$ - $0.9 \cdot 10^5$ kg/cm). The special testing device used for this purpose was described by S. V. Serensen and P. I. Kotov in Zavodskaya laboratoriya, XXV, 10, 1216 (1959) and XXVII, 8, 1013 (1961). Experimental results were first plotted in load rigidity versus fatigue curves and secondly, for convenience, in relative coordinates, $\bar{\varepsilon} = \varepsilon_p/\varepsilon_t$ and $\bar{N} = N_p/N_t$ ($\bar{\varepsilon}$ = combined elastic and plastic or plastic deformation; $\bar{N}$ = corresponding number of cycles), which are then related to the thermal deformation and to the number of cycles corresponding to the fatigue curve with maximum load rigidity (ε_t, N_t). Here, ε_p is the

Card 1/2

combined elastic and plastic deformation, and N_p is the corresponding number of cycles applied until the sample is destroyed. The experimental results processed in this way for the alloys under consideration fit a straight line. The fatigue curves obtained in relative coordinates can be approximated by a relation of the type $\bar{N} = A^{1-\bar{\varepsilon}}$, where A is a coefficient which for the EI437B alloy is $1.161 \cdot 10^4$, and for EI867 is $1.014 \cdot 10^5$. Oxidation caused by cyclic thermal loading affects the surface of EI437B, particularly in the high-temperature range, more severely than that of EI867 which shows superior resistance to thermal cyclic stresses. As EI437B may become unstable above 900°C, this alloy should not be subjected to cyclic thermal stresses under rigid conditions above this temperature. There are 6 figures.

ASSOCIATION: Moskovskiy inzhenerno-fizicheskiy institut (Moscow Engineering Physics Institute)

Card 2/2

SERENSEN, S.V.; KOTOV, P.I.

Evaluating the resistance to thermal stress fatigue by the method of varying rigidity of loading. Zav.lab. 28 no.10: 1233-1238 '62 (MIRA 15:10)
(Heat resistant alloys—Testing) (Metals—Fatigue)
(Deformations(Mechanics))

NIKOLAYEV, Yu.A.; KOTOV, P.S.

Machines for continuous harvesting of common cabbage. Trakt. i sel'khozmash. 33 no.8:36-37 Ag '63. (MIRA 16:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut sel'skokhozyaystvennogo mashinostroyeniya.

KOTOV P. T.

KUDYMOV, B.Ya., KOTOV, P.T.

Comparative analysis of induced polarization of sedimentary rocks.
Prikl. geofiz. no.16:213-226 '57. (MLRA 10:8)
(Rocks, Sedimentary)

KOTOV, P. T.

With Kudymov, B. Ya. "The Nature of the Induced Electrical Polarization in Sedimentary Rocks."

p. 134 in book Applied Geophysics; Collection of Articles, No. sp, Moscow Gostoptekhizdat, 1958, 267p.

These articles are concerned with the methodology of interpreting the results of gravimetric, seismic and electrical surveys. Review the collecting properties of rocks on the basis of data obtained from resistometers and the application of charged particle accelerators in well logging.

KUDYMOV, B.Ya.; KOTOV, P.T.

Nature of induced polarization in sedimentary rocks. Prikl. geofiz. no.20:134-140 '58. (MIRA 11:11)
(Polarization (Electricity))
(Prospecting--Geophysical methods)

KOTOV, P.T.

Electrical resistivity of rocks containing emulsions. Prikl. geofiz. no.39:179-196 '64. (MIRA 17:9)

KOMAROV, S.G.; KOTOV, P.T.

Determining the permeability of beds form induced potentials.
Prikl. geofiz. no.40:163-173 '64 (MIRA 18:1)

GRUDEV, D.I., doktor sel'skokhoz. nauk; SADOVNIKOVA, N.V., starshiy nauchnyy sotrudnik; SMIRNITSKAYA, N.Ye.; KARAVAYEVA, S.G.; KOTOV, P.Ya.; RODIONOVSKIY, M.S.; KRYLOVA, N.N., kand. biol. nauk; KRASIL'NIKOVA, T.F., inzhener-khimik; SOLNTSEVA, G.L., aspirant; KUZNETSOVA, V.V., mladshiy nauchnyy sotrudnik; Prinimali uchastiye: BAZAROVA, K.I.; MALYGINA, M.I.; BUDINSKAYA, S.Z.; SINITSYNA, I.K.

Comparative evaluation of the fattening and slaughtering characteristics of Shorthorn and Kalmyk steers and physico-chemical indices of their meat. Trudy VNIIMP no.16:5-23 '64. (MIRA 18:11)

KOTOV, P.Ya.; GORDON, N.M., otv. za vyp.

[Mechanization and automation of assembling in the tractor and agricultural machinery industry; bibliographical index of Soviet and foreign literature for 1957-1962] Mekhanizatsiia i avtomatizatsiia sborki v avtotraktornom i sel'skokhoziaistvennom mashinostroenii; bibliograficheskii spisok otechestvennoi i inostrannoi literatury za 1957-1962 gg. Moskva, 1963. 64 p. (MIRA 17:3)

1. TSentral'naya otraslevaya nauchno-tekhnicheskaya biblioteka mashinostroyeniya.

GRUDEV, D.I., doktor sel'skokhoz. nauk; KOTOV, P.Ya., nauchnyy sotrudnik; RODIONOVSKIY, M.S., nauchnyy sotrudnik; SYRKIN-SHKIOVSKIY, Ye A., nauchnyy sotrudnik; UNANOV, G.S., nauchnyy sotrudnik

Use of the tissue preparation VNIIMP-3 in the fattening of swines. Trudy VNIIMP no.15:13-19 '63. (MIRA 17:5)

SOKOLOV, A.V., prof.; LYASKOVSKAYA, Yu.N., kand. tekhn. nauk; UNANOV, G.S., starshiy nauchnyy sotrudnik; KARAVAYEVA, S.G., mladshiy nauchnyy sotrudnik; TALAYEVA, M.I., mladshiy nauchnyy sotrudnik; KRASIL'NIKOVA, T.F., mladshiy nauchnyy sotrudnik; LAVROVA, G.M., mladshiy nauchnyy sotrudnik; KOTOV, P.Ya., mladshiy nauchnyy sotrudnik; VASIL'CHENKO, T.A., mladshiy nauchnyy sotrudnik

Effect of the breed and feeding of swines on the quality of pork meat. Trudy VNIIMP no.12:3-29 '62. (MIRA 18:2)

TSYGANKOV, A.; KOTOV, R., agronom po zashchite rasteniy; NEYPERT, Yu.

Model plant protection farms. Zashch. rast. ot vred. i bol. 10 no.3:11-15 '65. (MIRA 19:1)

1. Nachal'nik Bryanskoy stantsii zashchity rasteniy (for TSygankov).
2. Sovkhoz "Mar'inskiy", Brasovskogo rayona (for Kotov).

KOTOV, R. G. (Moscow)

"Linguistic Statistics of Texts of the Russian Language."

Theses - Conference on Machine Translations, 15-21 May 1958, Moscow.

13 июня
в 17 часов

[illegible] (США)

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[illegible]

[illegible]

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[illegible]

Работа секций

1. СЕКЦИЯ ТЕОРИИ ИНФОРМАЦИИ

Руководитель В. И. Сифоров

9 июня
(с 10 до 16 часов)

В. И. Сифоров,
[illegible]

О [illegible]

[illegible]

О [illegible]

[illegible]

[illegible]

[illegible]

Испытания, [illegible]

9 июня
(с 18 до 22 часов)

[illegible]

[illegible]

[illegible]

О [illegible]

report submitted for the Centennial Meeting of the Scientific Technological Society of Radio Engineering and Electrical Communications im. A. S. Popov (VNORiE), Moscow, 8-12 June. 1959

KOTOV, S.

Our cultural center. Sov. profsoiuzy 7 no.17:27-28 S '59.
(MIRA 12:11)

1. Predsedatel' pravleniya Dvortsa kul'tury Ural'skogo alyuminiyevogo zavoda.
(Vocational education)

KOTOV, S., red.

[Contribution of the chemical workers of the Crimea to the national economy; a collection] Khimiki Kryma - narodnomu khoziaistvu; sbornik. Simizdat, 1963. 86 p.
(MIRA 17:6)

BORMOTOV, P.N., inzh.; GRISHIN, S.S.; ANTIPOV, Yu.; VITRIK, E.V., inzh.; KOSAREV, P.S.; NEKHOROSHEV, A.I.; RYABTSEV, G.I.; KOTOV, S.F.; SHABAGIN, M.A., gornospasatel' (Komi ASSR, g. Ukhta)

On P.M. Solvev'ev's article "Improve the design of the SP-55M self-rescuers." Bezop.truda v prom. 6 no.7:9-11 Jl '62. (MIRA 15:7)

1. Tekhnicheskoye upravleniye Kombinata ugol'nykh predpriyatiy Kuznetskogo kamennougol'nogo basseyna (for Bormotov). 2. Master shakhty im. Lenina Makeyevskogo tresta ugol'noy promyshlennosti Donbassa (for Grishin). 3. Komandir vzvoda voyenizirovannoy gornospassatel'noy chasti, pos.Zarubino, Novgorodskoy oblasti (for Antipov). 4. Shakhta No.24, Lubanskaya oblast' (for Vitrik). 5. Zaveduyushchiy gornymi rabotammi Nikitovskogo dolomitnogo kombinata (for Kosarev). 6. Komandir otdeleniya No.8 VGSO, g. Shakhty, Rostovskaya obl. (for Nekhoroshev). 7. Komandir gornospasatel'nogo otdeleniya, g. Shakhtersk, Donetskaya obl. (for Ryabtsev). 8. Zamestitel' glavnogo inzh. shakhty No.29 "Kapital'naya" Chelyabinskogo kombinata ugol'nykh predpriyatiy Ministerstva ugol'noy promyshlennosti SSSR (for Kotov).

(Respirators) (Solovev, P.M.)

KOTOV, S.G., inzh.

Effect of work conditions of the rolling stock of electric railroads on the realization of adhesion forces. Trudy MIIT no.207:104-112 '65. (MIRA 19:1)

Kotov, S.I.

KOTOV, S.I. (Orel).

Change the design of crossing joints. Put' i put.khoz. no.9:44 S '57. (MIRA 10:10)

1. Zamestitel' nachal'nika Orlovskoy distantsii.
(Railroads--Crossings)

KOTOV, S.I.

Neat track and waysides. Put' i put.khoz. 4 no.1:10-12 Ja '60. (MIRA 13:5)

1. Zamestitel' nachal'nika Orlovskoy distantsii.
(Orel District--Railroads--Maintenance and repair)

KREYNIS, Zosim Leybovich; KOTOV, Sergey Ivanovich; IVANOV, Anatoliy Petrovich; POTOTSKIY, G.I., inzh., red.; MEDVEDEVA, M.A., tekhn. red.

[Communist labor railroad division; experience of the Orlovskaya division of the Moscow Railroad] Distantsiia puti kommunisticheskogo truda; opyt Orlovskoi distantsii Moskovskoi dorogi. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1961. 60 p. (MIRA 14:7)

(Railroads—Maintenance and repair)

KOTOV, S.I.; KREYNIS, Z.L., inzh.

Use of hydraulic equipment for track alignment. Put' i put. khoz. 5 no.7;14-15 Jl '61. (MIRA 14:8)

1. Stantsiya Orel, Moskovskoy dorogi. 2. Zamestitel' nachal'nika Orlovskoy distantsii, Moskovskoy dorogi (for Kotov).
(Railroads—Track)
(Railroads—Hydraulic equipment)

KOTOV, S.I.

Establishing uniform traffic speed rates on runs and in stations. Put' i put. khoz. 8 no.5:5-7 My '64.
(MIRA 17:6)

1. Zamestitel' nachal'nika Orlovskoy distantsii Moskovskoy dorogi.

GERASIMOV,A.P.; NEVZGODIN, A.Ye.; KOTOV, S.I.

Five kolometer of rapair work achieved in three hours. Put' i put. khoz. 8 no.9:5-7 '64. (MIRA 17:11)

1. Zamestitel' nachal'nika otdeleniya dorogi, stantsiya Orel, Moskovskoy dorogi (for Gerasimov). 2. Nachal'nik Orlovskoy distantsii puti Moskovskoy dorogi (for Nevzgodin). 3. Zamestitel' nachal'nika Orlovskoy distantsii puti Moskovskoy dorogi (for Kotov).

KOTOV, S. S.

PA 190T71

USSR/Medicine (Veterinary) - Virus Diseases Sep 51

"Canine Plague (Febris Catarrhalis et Nervosa Canum)," Docent S. S. Kotov, Moscow Vet Acad

"Veterinariya" Vol XXVIII, No 9, pp 23-28

Holds that the disease is caused primarily by the virus, while Bac. bronchisepticus plays secondary role. Enumerates methods of treatment: therapy with normal horse serum and sera of reconvalescents or hyperimmune dogs; innoculation with antiserum plus virus (very effective). Passage of virus through ferrets 50 times results in fixation

LC 190T71

USSR/Medicine (Veterinary) - Virus Diseases (Contd) Sep 51

similar to that of virus of rabies: virus becomes more pathogenic to ferrets, which die 1 wk earlier, but has weakened effect on dogs and can be used for preventive innoculation. G. L. Radzivilovskiy proposed effective method of innoculation with phenolized blood of plague-infected animals (1%) followed by injection of live virus to reinforce immunity.

LC 190T71

KOTOV, Sergey Stepanovich

(Moscow Veterinary Acad - Academic degree of Doctor of Veterinary Sciences) based on his defense, 24 February 1955, in the Council of the Moscow Technological Inst of the Meat and Dairy Industry of his dissertation entitled: "Prophylactic Measures and the Treatment of Horses Afflicted with Stomach and Intestinal Diseases with Symptoms of Cholic (based on study of clinical data and biochemical and other indices of the blood)."

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no. 27, 24 Dec 55, Byulletin' MVO SSSR Uncl. JPRS/NY 548

KOTOV, S.S., doktor vet. nauk

Etiology of colic in horses. Veterinariia 36 no.11:49-50 N '59
(MIRA 13:3)

1. Moskovskaya veterinarnaya akademiya.
(Horses--Diseases) (Colic)

KOTOV, S. S.

"Biochinolotherapy of dogs infected with myelitis."

Veterinariya, Vol. 37, No. 7, 1960, p. 44

Dr. Vet. Sci, Moscow Vet. Acad.

KOTOV, S. S. and POLYAKIN, V. V. (Doctor of Veterinary Sciences and Candidate of Veterinary Sciences, Moscow Veterinary Academy)

"Dispensary service is an important factor in raising healthy herds"

Veterinariya, Vol. 38, no. 10, October 1961, pp. 36

Moscow Vet Academy (for Polyakin)

KOTOV, S.S., doktor veterin.nauk

Treatment with biochinol of dogs infected with myelitis.
Veterinariia 37 no.7:44 Jl '60. (MIRA 16:2)

1. Moskovskaya veterinarnaya akademiya.
(Spinal cord—Inflammation) (Dogs—Diseases and pests)
(Biochinol)

KOTOV, S.S., doktor veterinarnykh nauk; POLYAKIN, V.V., kand.veterinarnykh nauk

Dispensary treatment as the most important factor in raising healthy livestock. Veterinariia 38 no.10:36-37 O '61. (MIRA 16:2)

1. Moskovskaya veterinarnaya akademiya.
(Lyubertsy District--Veterinary medicine)

KOTOV, S.S., doktor vet. nauk; KOKOVIN, A.I., ordinator

A case from practice. Veterinariia 41 no.5:93 My '64.
(MIRA 18:3)

1. Moskovskaya veterinarnaya akademiya.

MYNKIN, A.Ye.; KOTOV, T.F., starshiy elektromekhanik

Communication between MSS stands using a two-line audio frequency channel. Avtom., telem. i sviaz' 5 no.6:34-35 Je '61.
(MIRA 14:9)

1. Nachal'nik tekhnicheskogo otdela sluzhby signalizatsii i svyazi Yugo-Vostochnoy dorogi, vneshtatnyy korrespondent zhurnala "Avtomatika, telemekhanika i svyaz'" (for Mynkin).
2. Voronezhskaya distantsiya signalizatsii i svyazi Yugo-Vostochnoy dorogi (for Kotov).
(Railroads—Communication systems)

KOTOV, V., polkovnik

Greater effectiveness of the struggle for military discipline.
Komm. Vooruzh. Sil 5 no.19:17-22 O '64. (MIRA 17:12)

KOTOV, V.

A lottery with cash and other prizes should be run annually.
Fin. SSSR 19 no.1:78-79 Ja '58. (MIRA 11:2)

1.Zaveduyushchiy tsentral'noy sberegatel'noy kassoy Roshchinskogo rayona Leningradskoy oblasti.
(Lotteries)

KOTOV, V.

Urgent problems of finance and credit in industry of regional economic councils. Den.i kred. 17 no.9:26-33 S '59.
(MIRA 12:12)

1. Nachal'nik finansovogo otdela Tul'skogo sovnarkhoza.
(Tula Province--Finance)

KOTOV, V.

Improving financial planning in regional economic councils.
Fin.SSSR 21 no.4:40-48 Ap '60. (MIRA 13:4)

1. Nachal'nik finansovogo otdela Tul'skogo sovnarkhoza.
(Tula Province--Finance)

KOTOV, V.

The neoliberal trend in modern bourgeois political economy.
Vop. ekon. no.4:45-58 Ap '61. (MIRA 14:3)
(Economics)

KOTOV, V.

Improve planning for costs and accumulations. Fin. SSSR 38 no.1:48-54 Ja '64. (MIRA 17:2)

1. Zamestitel' nachal'nika otdela finansov i sebestoimosti Gosplana SSSR.

KOTOV, V., general-leytenant tankovykh voysk

At the center of attention is the education of the educators.
Voen. vest. 42 no.4:55-58 Ap '63. (MIRA 17:1)

KOTOV, V.A.

Berardius bairdii Stejneger. Priroda 47 no.8:119 Ag '58. (MIRA 11:9)

1.Kavkazskiy gosudarstvennyy zapovednik, Maykop.
(Kronotskyi Gulf--Whales)

GOLGOFSKAYA, K.Yu.; KOTOV, V.A.

In the mountains of the Caucasus. Priroda 54 no.9:80-84 S '65. (MIRA 18:9)

1. Kavkazskiy gosudarstvennyy zapovednik.

KOTOV, V.A.

Turs and chamois in the Caucasus Preserve. Priroda 49 no.10:113 O '60. (MIRA 13:10)

1. Kavkazskiy gosudarstvennyy zapovednik.
(Caucasus Preserve--Ungulata)

KOTOV, V.A.

Catching and marking of turs (Capra caucasica) in the western Caucasus. Biul.MOIP.Otd.biol. 69 no.2:54-60 Mr-Ap '64. (MIRA 17:4)

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B

AUTHOR: Chertoprud, V. Ye.; Kotov, V. A.

TITLE: A study of the characteristics of the Solar activity cycle

SOURCE: Ref. zh. Astronomiya, Abs. 12.51.425

REF SOURCE: Astron. tsirkulyar, no. 318, marta 8, 1965, 1-4

TOPIC TAGS: Solar activity, solar activity cycle, solar cycle

ABSTRACT: The solar activity cycle was studied as a process which occurs in a natural oscillatory dynamic system of the second order, subject to the effect of briefly correlated fluctuations. Regardless of several differences in the processing of the observed atimal material, the results of the calculation of the position of the limiting cycle and the course of rigidity corresponds qualitatively to the results obtained earlier (RZhAstr, 1963, 3.51. 450; 1965, 5.51.376). The basic parameters of the obtained limit cycle are: $T_0 = 11.2 \pm 0.25$ y.; X_0 min = 6.4; X_0 max = 105.0; Y_0 min = 25.0, Y_0 max = 40.0. As in the earlier study, in the phase interval $\theta = 9.0$ to 10.5 there is a burst of rigidity. A conclusion was made

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that the presence of slow and varying fluctuations does not affect the basic distortions to the calculation of the limit cycle and rigidity and that these characteristics are sufficiently stable. [FM]
[Translation of abstract]

SUB CODE: 03/

Card 2/2 fv

SOLOZHENKIN, P.M.; GLEMBOTSKIY, V.A.; KOTOV, V.A.

Statistical method for determining the optimum conditions of mineral dressing. Dokl. AN Tadzh. SSR 6 no.2:21-25 '63. (MIRA 17:4)

1. Institut khimii AN Tadzhikskoy SSR. Predstavleno akademikom AN Tadzhikskoy SSR K.T.Poroshinym.

ANFILOV, A.A., inzh ; BAKALEYNIK, Ya.M., inzh.; BIRGER, G.I., inzh.; BRUK, B.S., inzh.; BUROV, A.I., inzh.; GINZBURG, V.L., inzh.; ZABELIN, V.L., inzh.; ZAPLECHNYY, Ye.G., inzh.; ISAYEV, D.V., inzh.; KLIMOVITSKIY, A.M., inzh.; KRYUCHKOV, V.V., inzh.; KOTOV, V.A., inzh.; LEYDERMAN, A.Ye., inzh.; PODGOYETSKIY, M.L., inzh.; SAZHAYEV, V.G., inzh.; SEVAST'YANOV, V.V., inzh.; FILIPPOV, S.F., inzh.; FROMBERG, A.B., inzh.; SHNEYEROV, M.S., inzh.; ERLIKH, G.M., inzh.; VERKHOVSKIY, B.I., red.; ZUBKOV, G.A., red.; KARKLINA, T.O., red.; OVCHARENKO, Ye.Ya., red.; ANTONOV, B.I., ved. red.

[New means of automatic and centralized control for nonferrous metal mines] Novye sredstva avtomatizatsii i dispetcherskogo upravleniia dlia rudnikov tsvetnoi metallurgii. Moskva, Nedra, 1965. 93 p. (MIRA 18:4)

KOTOV, V. B.; SILISHCHENSKAYA, O. M.

Selecting the mold strains for the distilling industry. Spirt. prom. 29 no.3:7-13 '63. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i spirtovoy promyshlennosti.

(Molds(Botany)) (Distillation)

KOTOV, V.B.

Selection of Aspergillus usamii by using mutagenic factors. Mikrobiologiia 32 no.2:266-271 Mr-Ap '63. (MIRA 17:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i spirtovoy promyshlennosti.

KOTOV, V.B.

Activity of the hydrolytic enzymes of Aspergillus usamii 3758/45 mutant obtained by the action of ultraviolet irradiation and ethylenimine. Ferm. i spirt. prom. 30 no.3:15-17 '64. (MIRA 18:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut fermentnoy i spirtovoy promyshlennosti.

KOTOV, V.P.

A simple instrument for cauterization of warts. Feldsher & akush. no.11:53-54 Nov 1953. (CLML 25:5)

1. Avdeyevka, Stalino Oblast.

KOTOV, V.F.

Incident in a laboratory. Med.sestra 17 no.1:41-42 Ja '58.
(STOMACH--EXPLORATION) (MIRA 11:3)

KOSHEVNIKOV, Georgiy Antonovich, akademik; KHAMIDOV, Aslam, kand. tekhn. nauk; KOTOV, Vladimir Fedorovich; GERASIMOV, Mikhail Fedorovich; BASEVICH, Lev Yefimovich; BUTYRIN, Aleksandr Vasil'yevich; RAYEV, Boris Grigor'yevich; BONDARENKO, M., red.; SALAKHUTDINOVA, A., tekhn. red.

[Machinery for cultivating cotton] Mashiny dlia vozdelyvaniia khlopchatnika. Tashkent, Gosizdat UzSSR, 1961. 182 p. (MIRA 15:7)

1. Nachal'nik otdela Gosudarstvennogo spetsial'nogo konstruktorskogo byuro (for Kotov). 2. Rukovoditel' gruppy gosudarstvennogo spetsial'nogo konstruktorskogo byuro po khlopku (for Basevich, Rayev).

(Cotton machinery)